

City of Fort Smith, Arkansas
Minutes of the Streets, Bridges and Associated Drainage
Capital Improvements Plan (CIP) Advisory Committee Meeting
May 24, 2018

A meeting of the Streets, Bridges and Associated Drainage Capital Improvement Plan (CIP) Advisory Committee was called to order at 12:02 p.m. on May 24, 2018, in the City's Planning Conference Room #326.

Committee members present:

Stan Vlademar – Ward 1
Tiffinee Baker – Ward 2
Aaron St. Amant – Ward 3 (Chairman)
Robert Brown – Ward 3
David Armbruster – Ward 3
Nathaniel Deason – Ward 4
Philip Rosar – Ward 4

City Staff Present:

Stan Snodgrass, Director of Engineering
George Allen, Director of Operations
Matt Meeker, Senior Project Engineer
Jennifer Stevens, Accounting Technician

Minutes of the Feb 22, 2018 Meeting

Philip Rosar made the motion to approve the minutes from the last meeting and Tiffinee Baker seconded the motion. The minutes were approved with all in favor and none opposed.

Old Business:

Review proposal for additional analysis on May Branch / Town Branch Drainage project

Stan Snodgrass noted that at the last meeting, FTN Associates had presented their findings for options to mitigate flooding in the Town Branch Basin and a buyout option of flooded properties was by far the most cost effective option. Stan noted that the CIP committee had then requested an additional proposal from FTN for two additional work items. The first was to determine the cost for a similar buyout along the May Branch drainage way and second was to provide a detailed plan/cost estimate for the construction of a shorter section of the May Branch channel starting at the Arkansas River and extending to North P Street by the wastewater treatment plant. Stan noted that the proposal for the evaluation of the buyout option on the May Branch area was approximately \$21,000 and recommended approval of it. Stan also noted that he had a

lengthy discussion with FTN Associates regarding the second proposal to evaluate the short section of May Branch channel from P Street to the river. He noted that this section would have very low impacts to flooding properties as this area has little development. He also noted that the cost for this section would be significant (estimated at \$15 mil) as it is the most downstream and largest channel section. As such no proposal was provided for that work. Stan noted that the approximately \$21,000 proposal for additional work would have to be taken to the Board for approval and added to FTN's existing contract.

David Armbruster stated that an annual amount of funding for drainage work should be provided each year in the CIP and the proposed solutions should be determined by the Engineering Department as they are the experts. David Armbruster then made a motion, seconded by Robert Brown, to recommend approval for the additional work item to evaluate the May Branch buyout option. The motion was approved with all in favor and none opposed.

Stan Snodgrass stated that the contract would be presented to the Board of Directors for approval and FTN would present the additional results at a future CIP meeting.

Presentation on updates to Street Pavement Design Standards

Dustin Tackett with Garver Engineering gave a summary on their findings and recommendations for the update to the City's Street Pavement Design Standards. A copy of that information is attached.

Stan Snodgrass stated that we are looking at draft update of these standards at our next meeting in August. He also noted that once approved by the CIP Committee the proposed changes would be presented to the engineering consultants before presentation to the Board of Directors.

New Business:

Stan Snodgrass introduced George Allen who is the City's new Director of Operations.

Stan Snodgrass gave an update on the Asphalt Preservation Techniques to be used on streets in an effort to make them last longer prior to requiring asphalt resurfacing. He noted that those plans would be out to bid in late summer.

David Armbruster stated we need to have the meetings at a later time in the day. David Armbruster made a motion to move the meeting time from 12:00 p.m. to 4:30 p.m., Stan Vlademar seconded the motion, with all in favor and none opposed.

Citizen's Forum:

Richard Morris stated that from the Division Street/6th Street four way stop sign, the truck route could be extended to P Street then down to 4th Street and intersecting B Street. Richard stated that the truck route needs more signage on 4th, 5th, & 6th Streets.

Richard Morris also was in favor of the Marshal's Museum, noting it will bring in a lot of tourists to our town. However, he noted that the Kelley Highway extension might bypass tourists away from the downtown businesses.

The next meeting will be August 9, 2018 at 4:30 p.m. at a location to be determined.

With no further discussion or business, a motion to adjourn was made by David Armbruster at 1:25 p.m. Stan Vlademar seconded the motion. All were in favor with none opposed.



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Street Pavement Design Standards
Summary of Findings and Recommendations
Streets, Bridges and Associated Drainage
Capital Improvement Plan (CIP) Advisory Committee Meeting
Thursday, May 24, 2018, 12:00 p.m.

A review of geotechnical investigations, site observations, pavement materials, and design methodology has resulted in the following recommendations for addressing poor pavement performance. Since the failures appear to be localized to a few specific areas, a complete overhaul of the minimum pavement standards are not recommended. The following prioritized list includes prospective remedies and a discussion of potential impacts.

Require underdrains on cut sides of the roadway sections. An underdrain would be required if the proposed pavement structure is going to be located below the existing grade or in-situ soil where water will continue to naturally flow toward the pavement base and subgrade layers. This would be a moderate cost increase to developers but would add an added layer of protection from moisture infiltrating the pavement structure.

Strengthen inspection requirements of undercut operations during construction. This could include required inspection from the City, developer's geotechnical engineer, and/or independent inspection. Typically, an anticipated range of undercut is estimated in the geotechnical report provided to the design consultant. Field conditions may vary between sample boring locations and qualified field personnel are essential to verify the unsuitable subgrade material is removed and/or improved during construction.

Increase minimum equivalent single axle load (ESAL) to account for construction traffic. This would take into account estimated heavy construction loads typically realized early in the pavement design life. The construction loads are in excess of the typical traffic loading to be expected throughout the life of the pavement especially on residential streets.

Modify subgrade specifications requirements. Increase minimum California Bearing Ratio (CBR) values given in Appendix C of the *City of Fort Smith Minimum Street Standards* (1985) resulting in higher subgrade capacities. Increase subgrade material requirements from 16" to 24" into the subgrade.

Consider increasing pavement design life. A 20 year design life is very typical for flexible pavements and compares to other municipalities throughout the region. Although an option, this approach does not appear to provide a solution to the failure issues based on all available information.

Consider increasing warranty period beyond 2 years. Extension of the warranty period would not likely benefit the City since most failures appear after any reasonable timeframe for a developer to provide a bond for the project. Similarly, requiring substantially complete buildout of the development prior to final acceptance by the City would result in unpredictable warranty timeframes. This could potentially reduce incentive for development within the City.